FY2013

WEST POINT MIL RESERVATION

Army Defense Environmental Restoration Program

Installation Action Plan

Printed 25 September 2013

Table of Contents

Table of Contents

Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multiyear cleanup program for an installation. The plan identifies environmental cleanup requirements at each site or area of concern (AOC) and proposes a comprehensive, installation-wide approach, along with the costs and schedules associated with conducting investigations and taking the necessary remedial actions (RAs).

In an effort to coordinate planning information between the restoration manager, the Installation Management Command (IMCOM) Northeast Region, the US Army Environmental Command (USAEC), the US Army Garrison - West Point (USAG-WP), the executing agencies, the regulatory agencies, and the public, an IAP was completed. The IAP is used to track requirements, schedules, and tentative budgets for all major Army installation cleanup programs.

All site-specific funding and schedule information has been prepared according to projected overall Army funding levels and is, therefore, subject to change.

Acronyms

AEDB-CC	Army Environmental Database - Compliance-related Cleanup
AEDB-R	Army Environmental Database - Restoration
AOC	Area of Concern
ARAR	Applicable or Relevant and Appropriate Requirement
BD	Blanket Drain
BRAC	Base Realignment and Closure
CC	Compliance-related Cleanup
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act of 1980
CMI(C)	Corrective Measures Implementation (Construction)
CMI(O)	Corrective Measures Implementation (Operation)
CMS	Corrective Measure Study
COC	Contaminant of Concern
CR	Compliance Restoration
CS	Confirmatory Sampling
CTC	Cost-to-Complete
DD	Decision Document
DERP	Defense Environmental Restoration Program
DES	Design
EOD	Explosive Ordnance Disposal
ER,A	Environmental Restoration, Army
FRA	Final Remedial Action
FUDS	Formerly Used Defense Sites
FY	Fiscal year
GWQS	Groundwater Quality Standards
HE	High Explosives
HRR	Historical Records Review
IAP	Installation Action Plan
IM	Interim Measures
IMCOM	Installation Management Command
in	inch
IR	Installation Restoration
IRA	Interim Remedial Action
IRP	Installation Restoration Program
K	thousand
LTM	Long-Term Management
LUC	Land Use Controls
MC	Munitions Constituent
MEC	Munitions and Explosives of Concern
MIL	Military
mm	millimeter
MMRP	Military Munitions Response Program
MR	Munitions Response
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
MTBE	Methyl Tertiary Butyl Ether

Acronyms

N/A	Not Applicable
NFA	No Further Action
NPL	National Priorities List
NYCRR	New York Codes Rules and Regulations
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
ODUSD(I&E)	Office of the Deputy Under Secretary of Defense for Installations and Environment
OE	Ordnance and Explosives
PA	Preliminary Assessment
PAO	Public Affairs Office
PBA	Performance-Based Acquisition
PBC	Performance-Based Contract
POL	Petroleum, Oil and Lubricants
PX	Post Exchange
RA	Remedial Action
RA(C)	Remedial Action (Construction)
RA(O)	Remedial Action (Operations)
RAB	Restoration Advisory Board
RACER	Remedial Action Cost Engineering and Requirements
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RI	Remedial Investigation
RIP	Remedy-in-Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
SI	Site inspections
STAS	Stewart Army Subpost
STR	Skeet and Trap Range
SWMU	Solid Waste Management Unit
TAL	Target Analyte List
TAPP	Technical Assistance for Public Participation
TBD	To Be Determined
TD	Transferred
TMP	Transportation Motor Pool
TRC	Technical Review Committee
USACE	US Army Corps of Engineers
USAEC	US Army Environmental Command
USAEHA	US Army Environmental Hygiene Agency
USAG	US Army Garrison
USEPA	US Environmental Protection Agency
USMA	US Military Academy
USMAPS	US Military Academy Preparatory School

Acronyms

UST	Underground Storage Tank
UXO	Unexploded Ordnance
VOC	Volatile Organic Compounds
WP	West Point
WWI	World War I
WWII	World War II

Acronym Translation Table

CERCLA		RCRA
Preliminary Assessment(PA)	=	RCRA Facility Assessment(RFA)
Site Inspection(SI)	=	Confirmation Sampling(CS)
Remedial Investigation/Feasibility Study(RI/FS)	=	RCRA Facility Investigation/Corrective Measures Study(RFI/CMS)
Remedial Design(RD)	=	Design(DES)
Remedial Action (Construction)(RA(C))	=	Corrective Measures Implementation (Construction)(CMI(C))
Remedial Action (Operation)(RA(O))	=	Corrective Measures Implementation (Operation)(CMI(O))
Long Term Management(LTM)	=	Long Term Management(LTM)
Interim Remedial Action(IRA)	=	Interim Measure(IM)

Installation Information

Installation Locale

Installation Size (Acreage): 15974
City: West Point
County: Orange
State: New York
Other Locale Information

The USAG-WP is located in Orange County in the state of New York, on the west bank of the Hudson River, approximately 45 miles north of New York City. It consists of 15,974 acres, with the main post comprising 2,520 acres. It is bounded by New York State Route 218, the Hudson River, the village of Highland Falls, and US Route 9W. USAG-WP is crossed by the Hudson Highlands, a belt of steep-walled, knobbed ridges, irregular hills and mountains, and it is a registered National Historic Landmark.

Installation Mission

The mission of the US Military Academy (USMA) at West Point is to educate, train, and inspire the Corps of Cadets so that each graduate is a commissioned leader of character committed to the values of duty, honor, and country, and prepared for a career of professional excellence and service to the nation as an officer in the United States Army. The USAG-WP supports the USMA mission by providing base operations, community support programs and facilities while maintaining a safe and secure environment to enhance the well being of the West Point community.

Lead Organization

IMCOM

Lead Executing Agencies for Installation

USAG-WP Directorate of Public Works/Environmental Division

IMCOM

USAEC

Regulator Participation

Federal	US Environmental Protection Agency (USEPA), Region II
State	New York State Department of Environmental Conservation (NYSDEC) Central Office in Albany, New York

National Priorities List (NPL) Status

WEST POINT MIL RESERVATION is not on the NPL

Installation Restoration Advisory Board (RAB)/Technical Review Committee (TRC)/Technical Assistance for Public Participation (TAPP) Status

The community has expressed no sufficient, sustained interest in a RAB.

Installation Information

Installation Program Summaries

IRP

Primary Contaminants of Concern: Metals, Nitrate/Nitrite, Petroleum, Oil and Lubricants (POL)

Affected Media of Concern: Groundwater, Surface Water

MMRP

Primary Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)

Affected Media of Concern: Groundwater, Sediment, Soil, Surface Water

CR

Primary Contaminants of Concern: Petroleum, Oil and Lubricants (POL), Volatiles (VOC)

Affected Media of Concern: Soil

5-Year / Periodic Review Summary

5-Year / Periodic Review Summary

Status	Start Date	End Date	End FY
Complete	201010	201209	2012
Complete	200510	200510	2006

Last Completed 5-Year / Periodic Review Details

Associated ROD/DD Name	Sites
MOTORPOOL LANDFILL	WSTPT-11
Michie Lot Landfills C,E&F	WSTPT-04, WSTPT-06, WSTPT-07A
Michie Lots A & B	WSTPT-02, WSTPT-03
Motorpool East	WSTPT-11A
POST SCHOOL LANDFILL	WSTPT-10
Ski Lot Landfill	WSTPT-09

Results NYSDEC concurred with results of 5 year review but disagreed with proposed sampling reduction.

Actions West Point is submitting new proposal to reduce LTM for next 5 year period.

Plans Next 5 year review is planned for 2015.

Recommendations and Implementation Plans:
N/A

Cleanup Program Summary

Installation Historic Activity

West Point is an active US Army installation officially established in 1778. The USMA was established at West Point on March 16, 1802. The initial purpose of the academy was to obtain military technicians for all branches of the military service, to encourage the study of military art nationally, to raise the level of training of the militia, and to encourage the practical study of every science.

Lands formerly known as Stewart Army Subpost (STAS) are located approximately 14 miles northwest of West Point, in Orange County, in the town of New Windsor, New York. STAS provided overflow family housing for West Point and included facility and community support to residents and tenants. The divestiture of the STAS site occurred as follows: in November 1999, West Point transferred 263.86 acres to the town of New Windsor, in Orange County, New York. On Sept. 29, 1999, 40.4 acres were transferred to the 77th Regional Support Command (Army Reserve). On Feb. 3, 2000, 78.63 acres and 11.69 acres (easement) were transferred to the US Marine Corps Reserve Marine Aircraft Group 49, Detachment B.

In 1961, West Point was designated as a National Historical Landmark included in the National Register of Historic Places and protected by Executive Order 11593.

Installation Program Cleanup Progress

IRP

Prior Year Progress: Inspections, minor maintenance, and groundwater monitoring were conducted at 15 sites through a performance-based acquisition (PBA) awarded in 2008. A new contract was awarded in 2013 to perform maintenance at all landfills. In 2013 Michie Lot E, F, Ski Lot, and Organic Compost landfills will have major repairs completed thru the new contract.

Future Plan of Action: Annual inspections, minor maintenance, and groundwater monitoring.

MMRP

Prior Year Progress: A remedial investigation (RI) was underway at nine sites. The feasibility study for Michie Stadium was underway. A scope of work was being prepared for the new Crow¿s Nest site.

Future Plan of Action: Continue RI work at multiple sites. Award a contract to perform an RI at Crows Nest.

CR

Prior Year Progress: No current activities are being conducted.

Future Plan of Action: Actions at CCUST1230 will include excavation of contaminated soil.

WEST POINT MIL RESERVATION

Army Defense Environmental Restoration Program
Installation Restoration Program

IRP Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 30/16

Installation Site Types with Future and/or Underway Phases

14 Landfill

(WSTPT-01, WSTPT-02, WSTPT-03, WSTPT-04, WSTPT-05, WSTPT-06, WSTPT-07A, WSTPT-09, WSTPT-10, WSTPT-11, WSTPT-15B, WSTPT-16, WSTPT-35A, WSTPT-48)

Most Widespread Contaminants of Concern

Metals, Nitrate/Nitrite, Petroleum, Oil and Lubricants (POL)

Media of Concern

Groundwater, Surface Water

Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY
WSTPT-16	ORGANIC COMPOST LOT	IRA	DRAINAGE CONTROLS	1991
WSTPT-45	CROW'S NEST AREA	IRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1994
WSTPT-49	USTS AT BUILDING 505	FRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1994
WSTPT-50	BLDG. 632 NAPTHA TANKS	FRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	1994
WSTPT-07A	STADIUM LOT F LANDFILL	IRA	DRAINAGE CONTROLS	1996
WSTPT-09	SKI SLOPE LANDFILL	IRA	DRAINAGE CONTROLS	1996
WSTPT-10	POST SCHOOL LANDFILL	IRA	DRAINAGE CONTROLS	1996
WSTPT-15A	MORGAN FARM LANDFILL	FRA	REMOVAL	1996
WSTPT-07A	STADIUM LOT F LANDFILL	IRA	DRAINAGE CONTROLS	1997
WSTPT-13	VILLAGE FARM LANDFILL	FRA	REMOVAL	1998
WSTPT-44	SKEET AND TRAP RANGE	FRA	NATURAL ATTENUATION	1998
WSTPT-04	STADIUM LOT C LANDFILL	FRA	CAPPING	1999
WSTPT-06	STADIUM LOT E LANDFILL	FRA	CAPPING	1999
WSTPT-07A	STADIUM LOT F LANDFILL	FRA	CAPPING	1999
WSTPT-10	POST SCHOOL LANDFILL	FRA	DRAINAGE CONTROLS	1999
WSTPT-04	STADIUM LOT C LANDFILL	FRA	DRAINAGE CONTROLS	2001
WSTPT-06	STADIUM LOT E LANDFILL	FRA	DRAINAGE CONTROLS	2001
WSTPT-07A	STADIUM LOT F LANDFILL	FRA	DRAINAGE CONTROLS	2001
WSTPT-09	SKI SLOPE LANDFILL	FRA	DRAINAGE CONTROLS	2001
WSTPT-09	SKI SLOPE LANDFILL	FRA	CAPPING	2001
WSTPT-11	MOTORPOOL LANDFILL	FRA	DRAINAGE CONTROLS	2001
WSTPT-11A	MOTORPOOL EAST LANDFILL	FRA	DRAINAGE CONTROLS	2001
WSTPT-11A	MOTORPOOL EAST LANDFILL	FRA	CAPPING	2001
WSTPT-02	STADIUM LOT A LANDFILL	FRA	DRAINAGE CONTROLS	2002
WSTPT-02	STADIUM LOT A LANDFILL	FRA	CAPPING	2002
WSTPT-03	STADIUM LOT B LANDFILL	FRA	CAPPING	2002
WSTPT-03	STADIUM LOT B LANDFILL	FRA	DRAINAGE CONTROLS	2002

Duration of IRP

Date of IRP Inception: 198404

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 200207/200207

Date of IRP completion including Long Term Management (LTM): 204309

IRP Contamination Assessment

Contamination Assessment Overview

In November 1988 USAG-WP submitted a Resource Conservation and Recovery Act (RCRA) Part B permit application to the USEPA for hazardous waste storage and a Subpart X permit for an open burn/open detonation site. USAG-WP is considered a large quantity generator of hazardous waste. Accumulated hazardous waste is moved to a central storage area where it is staged for up to 90 days prior to shipment. In December 1988 the application for the container storage facility was rescinded by USAG-WP and the container storage sites underwent closure inspection and testing by the USEPA under "Closure Prior to Loss of Interim Status." Although the Part B permit had been rescinded, the corrective action provisions remain per the 1984 Hazardous and Solid Waste Amendments section 3004 (h). Therefore, USAG-WP remains under interim status while long-term management (LTM) is being conducted.

In November 1990 the US Army Environmental Hygiene Agency (USAEHA) (now the US Army Center for Health Promotion and Preventive Medicine) conducted a survey of solid waste management units (SWMUs) at USAG-WP pursuant to RCRA corrective action requirements. The USAEHA survey identified 16 inactive landfills. Subsequently, USAG-WP identified four additional inactive landfills. The landfills are all under LTM.

In 1991, a preliminary assessment (PA) was initiated prior to the replacement of a natural gas line that crossed the Crow's Nest area of Storm King Mountain. Research for the project revealed that the Crow's Nest area had been an artillery impact area. The project to replace the gas line was terminated following the discovery of ordnance and explosive (OE) waste along the proposed gas line. An RI limited surface sweep discovered 75 suspect OE wastes; 15 were on adjacent park property. The Army safety office assigned the site a risk assessment code ranking of two, which dropped its priority on the Installation Restoration Program (IRP) work plan.

In 1992, four known abandoned tanks located at USAG-WP were added to the inventory of abandoned tanks (WSTPT-46) slated for locating and removal at STAS. In 1992 an investigation was initiated to assess the impact of lead deposition in a wetland from a formerly used skeet and trap range (STR) at Camp Buckner.

Cragston Landfill (WSTPT-14) is a sanitary landfill that underwent RCRA Subtitle D closure outside the IRP. The South Fill (WSTPT-12), the Hospital Parking Lot (WSTPT-23A), and the Stadium Lots G (WSTPT-07B) and H (WSTPT-07C) landfills are listed in the Army Environmental Database-Restoration (AEDB-R) database, but no further response action is planned, since records indicate they were used for clean construction and demolition debris and no releases are evident.

USAG-WP has 29 sites (14 of the sites listed under AEDB-R are not active) grouped into six projects under the IRP. Landfills account for 20 of these sites. These landfills were used from the 1940s to the 1980s to dispose of municipal solid waste, construction and demolition debris, and land clearing debris. Analytical results for the leachate samples from several of the landfills have exhibited heavy metals constituents. The other projects include a former STR located in the Camp Buckner wetlands where lead deposits were of concern (WSTPT-44), a former impact area at Crow's Nest where OE waste is present (WSTPT-45), and the closure of several abandoned underground storage tanks (USTs) (WSTPT-46 and -47).

The fifth year of LTM was completed in 2005 and a five-year review of data evaluation report was required with the NYSDEC. The NYSDEC agreed to a reduced sampling frequency and time frame for the site's closure (e.g., discontinue sampling).

Another five-year review was completed in 2012.

Cleanup Exit Strategy

The LTM and cap maintenance will continue under the PBA as will five-year data reviews.

IRP Previous Studies

	Title	Author	Date
1988			
	Design Analysis Report for Michie Stadium Parking Lot Landfills (C, E & F)	Louis Berger & Associates, Inc.	JUL-1988
1994			
	Draft Work Plan and Chemical Data Acquisition Plan, RCRA Facility Assessment of Ten Landfills	Woodward Clyde Federal Services	JAN-1994
	Subsurface Investigation Report of 6 Landfills	LAW Engineering and Environmental Services	JUL-1994
	Remedial Investigation at Building 2228 Fueling Facility	EA Engineering, Science and Technology	AUG-1994
1995			
	Project Plans for Expanded RCRA Facility Assessment of Four Landfills	EA Engineering, Science and Technology	MAR-1995
	RCRA Facility Assessment (RFA) of Ten Landfills Report	Woodward Clyde Federal Services	JUN-1995
	Project Plans for the Phase II Remedial Investigation and Leachate Management Analysis of Six Landfills	EA Engineering, Science and Technology	JUN-1995
1996			
	Decision Document Camp Buckner Skeet and Trap Range	EA Engineering, Science and Technology	JAN-1996
	Phase II Investigation Report of Six Landfills	EA Engineering, Science and Technology	AUG-1996
	Phase II Leachate Management Analysis of Six Landfills	EA Engineering, Science and Technology	AUG-1996
	Quality Control Summary Report of Six Landfills	EA Engineering, Science and Technology	AUG-1996
	Expanded RCRA Facility Assessment of Four Landfills	EA Engineering, Science and Technology	SEP-1996
	Quality Control Summary Report of Four Landfills	EA Engineering, Science and Technology	SEP-1996
	USMA Landfill Remediation Contract No. DACAW45-94-D-0054 Delivery Order No. 19	IT Corporation	SEP-1996
	Design Concept for Post School Landfill Closure	Malcolm Pirnie, Inc.	OCT-1996
1997			
	Decision Document for the Village Farm Landfill	DHPW EMD	APR-1997
	RCRA Facility Investigation of Ten Landfills	Malcolm Pirnie, Inc.	JUN-1997
	Post School Landfill Closure Design, Design Analysis Report	Malcolm Pirnie, Inc.	JUL-1997
	Post School Landfill Closure Design Contract Specifications	Malcolm Pirnie, Inc.	JUL-1997
1998			
	Contract Specifications for Michie Stadium Parking Lot Landfills (C, E & F)	Malcolm Pirnie, Inc.	JUL-1998
	Design Analysis Report for Michie Stadium Parking Lot Landfills (C, E & F)	Malcolm Pirnie, Inc.	JUL-1998
	Design Analysis Report for Motor Pool Landfill Closure	EA Engineering, Science and Technology	AUG-1998
1999			
	The Final Report Addendum for Village Farm Landfill Remediation	IT Corporation	JAN-1999
	Decision Document for the Motorpool Landfill	DHPW EMD	JAN-1999

IRP Previous Studies

	Title	Author	Date
1999			
	Decision Document for the Post School Landfill	DHPW EMD	JAN-1999
	Decision Document for Lots C, E, and F	DHPW EMD	JAN-1999
	100% Completion Phase Design Analysis Report, Construction Cost Estimate and Contract Specifications for Michie Stadium Parking Lot Landfills (C, E, & F)	Unknown	FEB-1999
	Design Analysis Report Ski Lot Landfill Closure	Sparks, EA Engineering, Science and Technology	JUN-1999
	Design Analysis Report Motor Pool East Landfill Closure	EA Engineering, Science and Technology	JUN-1999
	Decision Document for the Motorpool East Landfill	DHPW EMD	OCT-1999
	Ten Landfills RCRA Facility Investigation Phase II Groundwater Monitoring Draft Final Report	Malcolm Pirnie, Inc.	DEC-1999
2000			
	Contract Specifications for Michie Stadium Parking Lot Landfills (C, E, & F)	Malcolm Pirnie, Inc.	FEB-2000
2001			
	Sampling and Analysis Plan for Long-Term Monitoring and Maintenance Program at 15 Landfills	EA Engineering, Science and Technology	DEC-2001
2002			
	Decision Document for the 12,000 Gallon UST at STAS	DHPW EMD	MAR-2002
	Data Summary Sheet Report for Year 2001 LTM Maintenance Project at 15 Landfills	EA Engineering, Science and Technology	MAR-2002
	Engineering Inspection Study for the Year 2002 LTM Maintenance Project at 15 Landfills	EA Engineering, Science and Technology	JUN-2002
	Data Summary Sheet Report for Year 2002 LTM Maintenance Project at 15 Landfills	EA Engineering, Science and Technology	JUL-2002
2003			
	Data Summary Sheet Report for Year 2003 LTM Maintenance Project at 15 Landfills	EA Engineering, Science and Technology	JUL-2003
	USMA Installation Action Plan	DHPW EMD	NOV-2003
2004			
	Monitoring Well Repairs at Multiple Landfill Locations and Landfill Maintenance	EA Engineering, Science and Technology	AUG-2004
2005			
	Five-Year Review Data Summary Report for the Long-Term Monitoring and Maintenance Program at 15 Landfills	EA Engineering, Science and Technology	SEP-2005
2008			
	Landfill Constructability Report, Relocation of US Military Academy Preparatory School	Ewing Cole	AUG-2008
2012			
	2nd 5 Year Review	Plexus	MAY-2012

WEST POINT MIL RESERVATION

Installation Restoration Program

Site Descriptions

Site ID: WSTPT-01
Site Name: PXLANDFILL

STATUS

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Metals

Media of Concern: Groundwater, Surface Water

Phases	Start	End
RFA	199011	199104
CS	199208	199506
RFI/CMS	199604	199912
LTM	200109	204309

RIP Date: N/A

RC Date: 199912

SITE DESCRIPTION

The Post Exchange (PX) Landfill is part of the Ten Landfills RCRA Facility Investigation (RFI) Phase II Groundwater Monitoring Report (1999) and is a 2.5 acre landfill located under the parking lot at the former PX. During the 1940s this was the installation's landfill for domestic waste. The pit and area methods of landfilling were used here. The landfill is closed, covered and paved. A parking lot and the former PX service station now cover part of the site. Although leachate seeps were observed at this site in the past, recent engineering inspections have not detected any.

In March 1998, the NYSDEC requested additional sampling of this site. The additional sampling was performed as a supplement to the monitoring at the 10 landfills and in January 2000 the results of an investigation were submitted to the NYSDEC. The supplement recommended no further action (NFA) at the landfill based on sample results. A decision document (DD) was not prepared because an RA was not required. The PX Landfill has been included in USAG-WP's sampling and analysis plan for LTM and maintenance, and groundwater sampling is conducted at this site. In fiscal year (FY) 07 USAG-WP proposed, and the state agreed to, a sampling frequency reduced to every five years. As a result of the 2010 five-year review, in 2012 West Point proposed reducing sampling of all West Point IRP landfills to every 5 years. The NYSDEC agreed, however sampling would be conducted at the halfway point (2.5 years) if the five-year sample showed a regulatory exceedance of non-nutrient target analyte list (TAL) metals. Inspections are required annually.

In FY08, the landfill was recapped with improved drainage and curbing. In addition to minor annual maintenance it is expected the cap will require periodic resurfacing.

Groundwater sampling was conducted in 2008. An exceedance of selenium was detected. Sampling will occur again in 2013.

According to the data reviewed, the site inspection (SI), and the interviews, the remedy is functioning as intended. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. Metal Applicable or Relevant and Appropriate Requirements (ARARs) have been met, with the exception of iron, magnesium, selenium, and sodium (PXMW-03). The historic exceedances of iron and sodium are not increasing in concentration, although current conditions at PXMW-01 are unknown at this time. In addition, the elevated iron and sodium could be attributed to naturally occurring conditions due to detections found in the upgradient well. There have been no changes in the toxicity factors for the contaminants of concern (COC) and chemicals with exceedances since 2004, and there have been no changes to the standardized risk assessment methodology that could affect the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

CLEANUP/EXIT STRATEGY

Perform annual inspections, groundwater monitoring every five years, and site maintenance.

Site ID: WSTPT-02
Site Name: STADIUM LOT A LANDFILL

STATUS

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Metals

Media of Concern: Groundwater, Surface Water

Phases	Start	End
RFA	199011	199104
CS	199208	199506
RFI/CMS	199604	199706
DES	199809	200010
CMI(C)	200109	200207
LTM	200208	204309

RIP Date: N/A

RC Date: 200207

SITE DESCRIPTION

The Michie Stadium Lot A Landfill is part of the 10-landfill investigation and is located west of Michie Stadium. This 2.1-acre landfill was used from about 1952 to 1954. The pit and trench methods were used. The landfill is closed and completely paved. In FY02 cap and drainage system improvements were constructed. The site is now used as a parking lot. Although leachate seeps were observed at this site in the past, recent engineering inspections have not detected any. The LTM includes maintaining the cap, drainage system and monitoring wells and performing annual groundwater monitoring. As a result of the 2010 five-year review, in 2012 West Point proposed reducing sampling of all West Point IRP landfills to every five years. The NYSDEC agreed, however sampling would be conducted at the halfway point (2.5 years) if the five-year sample showed a regulatory exceedance of non-nutrient TAL metals. Inspections are required annually.

Groundwater monitoring was last conducted in 2011. An exceedance for chromium was detected so additional sampling will be required in 2013.

Based on the data collected in 2011, sodium, chromium, and iron are the only analytes that exceed NYSDEC groundwater quality standards (GWQS). The exceedances of iron and sodium are not increasing in concentration. In addition, elevated iron concentrations could be attributed to naturally occurring conditions due to detections found in the upgradient well. Based on these criteria, the remedy is functioning as intended as outlined by the DD; however, chromium levels should be monitored as the sampling program continues to determine if any trends are developing.

It is anticipated that the landfill will require periodic re-grading and re-surfacing.

CLEANUP/EXIT STRATEGY

Perform annual inspections, groundwater monitoring every five years, and site maintenance.

Site ID: WSTPT-03
Site Name: STADIUM LOT B LANDFILL

STATUS

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Metals

Media of Concern: Groundwater, Surface Water

Phases	Start	End
RFA	199011	199104
CS	199208	199506
RFI/CMS	199604	199706
DES	199809	200010
CMI(C)	200109	200207
LTM	200208	204309

RIP Date: N/A

RC Date: 200207

SITE DESCRIPTION

Site WSTPT-03, which was part of the 10-landfill project, is located west of Michie Stadium, adjacent to site WSTPT-02; access is from Stony Lonesome Road. This 0.3-acre landfill reportedly received refuse in 1954. The pit and trench methods were used. The landfill is closed and completely paved. In FY02 cap and drainage system improvements were constructed. The site is now used as a parking lot. Although leachate seeps were observed at this site in the past, recent engineering inspections have not detected any seepage. The LTM for this site includes cap and drainage maintenance. The site does not require annual groundwater monitoring; however the downgradient well from Lot A will be sampled to verify there is no contamination from Lot B.

As a result of the 2010 five-year review, in 2012 West Point proposed reducing sampling of all West Point IRP landfills to every five years. The NYSDEC agreed, however sampling would be conducted at the halfway point (2.5 years) if the five-year sample showed a regulatory exceedance of non-nutrient TAL metals. Inspections are required annually.

Groundwater monitoring was last conducted in 2011. An exceedance for chromium was detected so additional sampling will be required in 2013.

Based on the data collected in 2011, sodium, chromium, and iron are the only analytes that exceed NYSDEC GWQS. The exceedances of iron and sodium are not increasing in concentration. In addition, elevated iron concentrations could be attributed to naturally occurring conditions due to detections found in the upgradient well. Based on these criteria, the remedy is functioning as intended as outlined by the decision document. However, chromium levels should be monitored as the sampling program continues to determine if any trends are developing.

It is anticipated that the landfill will require periodic re-grading and re-surfacing.

CLEANUP/EXIT STRATEGY

Perform annual inspections, groundwater monitoring every five years, and site maintenance.

Site ID: WSTPT-04
Site Name: STADIUM LOT C LANDFILL

STATUS

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Metals

Media of Concern: Groundwater

Phases	Start	End
RFA	199011	199104
CS	199208	199506
RFI/CMS	199604	199707
DES	199609	200004
CMI(C)	199901	200107
LTM	200109	204309

RIP Date: N/A

RC Date: 200107

SITE DESCRIPTION

Site WSTPT-04 was part of the 10-landfill project and is located west of Michie Stadium; access is from Stony Lonesome Road. This 1.8-acre landfill was used from about 1955 through 1956. The pit and trench methods were used. The landfill is closed and undergoing LTM. An asphalt cap was installed in 2007 and drainage improvements were made to prevent infiltration and reduce leachate generation. The site is now used as a parking lot. Although leachate seepage has been identified at this site in the past, recent engineering inspections have not detected any. It is anticipated that the landfill will require annual maintenance and periodic re-grading and re-surfacing.

This site has been included in USAG-WP's sampling and analysis plan for LTM and maintenance, and groundwater sampling is conducted at this site. In FY07, USAG-WP proposed, and the state agreed to, a sampling frequency reduced to every five years. As a result of the 2010 five-year review, in 2012 West Point proposed reducing sampling of all West Point IRP landfills to every five years. The NYSDEC agreed, however sampling would be conducted at the halfway point (2.5 years) if the five-year sample showed a regulatory exceedance of non-nutrient TAL metals. Inspections are required annually.

Groundwater monitoring was last conducted in 2008. Exceedances for arsenic and cadmium were detected. Additional sampling will be required in 2013.

The remedy is functioning as intended. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. Metal ARARs have been met, with the exception of sodium. The exceedance of sodium is not increasing in concentration and could be attributed to the use of salt during the winter months. This is the first time that arsenic and cadmium have been detected and levels should be watched to determine what trends, if any, are surfacing as the sampling program continues. There have been no changes in the toxicity factors for the COC and chemicals with exceedances since 2004, and there have been no changes to the standardized risk assessment methodology that could affect the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

CLEANUP/EXIT STRATEGY

Perform annual inspections, groundwater monitoring every five years, and site maintenance.

Site ID: WSTPT-05
Site Name: STADIUM LOT D LANDFILL

STATUS

Regulatory Driver: RCRA

RRSE: MEDIUM

Contaminants of Concern: Metals

Media of Concern: Groundwater

Phases	Start	End
RFA	199011	199104
CS	199107	199407
RFI/CMS	199408	199608
LTM	200109	204309

RIP Date: N/A

RC Date: 199701

SITE DESCRIPTION

Site WSTPT-05, part of the six-landfill project, is located west of Michie Stadium; access is from Stony Lonesome Road. This 2.25-acre landfill was active between 1956 and 1958. The pit and trench methods were used. The site is now used as a parking lot. A perimeter drain has been installed. Although leachate seeps have been identified at this site in the past, recent engineering inspections did not detect any seeps. In FY07 a new cap was completed and drainage improvements were made. It is anticipated that the landfill will require annual maintenance and periodic re-grading and re-surfacing. The LTM includes groundwater monitoring, drainage swale cleaning, and cap maintenance.

In 2012, as a result of the 2010 five-year review, West Point proposed reducing sampling of all West Point IRP landfills to every five years. The NYSDEC agreed, however sampling would be conducted at the halfway point (2.5 years) if the five-year sample showed a regulatory exceedance of non-nutrient TAL metals. Inspections are required annually.

In 2010, an upgradient well was sampled to evaluate background conditions. Groundwater monitoring was last conducted in 2011. No exceedances for non-nutrient metals were detected. Additional sampling will be required in 2016.

The remedy is functioning as intended. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. Metal ARARs have been met, with the exception of iron, manganese, and sodium. The exceedances of iron, manganese, and sodium, are not increasing in concentration and the elevated levels of iron could be attributed to naturally occurring conditions due to detections found in the upgradient well. In addition, elevated sodium concentrations are most likely attributable to the use of salt during the winter months. There have been no changes in the toxicity factors for the COC and chemicals with exceedances since 2004, and there have been no changes to the standardized risk assessment methodology that could affect the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

CLEANUP/EXIT STRATEGY

Perform annual inspections, groundwater monitoring every five years, and site maintenance.

Site ID: WSTPT-06
Site Name: STADIUM LOT E LANDFILL

STATUS

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Metals

Media of Concern: Groundwater, Surface Water

Phases	Start	End
RFA	199011	199104
CS	199208	199506
RFI/CMS	199604	199706
DES	199609	200004
CMI(C)	199901	200107
LTM	200109	204309

RIP Date: N/A

RC Date: 200107

SITE DESCRIPTION

Site WSTPT-06, part of the 10-landfill project, is located west of Michie Stadium; access is from Stony Lonesome Road. This 4.5 acre landfill was used from about 1952 through 1954. The pit and trench methods were used. The landfill is closed and completely paved. The site is now used as a parking lot. In FY02 cap and drainage system improvements were constructed. Leachate seeps have been identified at this site in the past and a leachate collection system was installed in FY01. The site is scheduled for regrading and resurfacing in 2013. The leachate collection system will also be cleaned and repaired.

Site WSTPT-06 has been included in USAG-WP's sampling and analysis plan for LTM and maintenance, and groundwater sampling is conducted at this site. The LTM includes groundwater monitoring, cap and monitoring well maintenance, and drainage swale cleaning. In FY07, USAG-WP proposed, and the state agreed to, a sampling frequency reduced to every five years. As a result of the 2010 five-year review, in 2012 West Point proposed reducing sampling of all West Point IRP landfills to every five years. The NYSDEC agreed, however sampling would be conducted at the halfway point (2.5 years) if the five-year sample showed a regulatory exceedance of non-nutrient TAL metals. Inspections are required annually.

Groundwater monitoring was last conducted in 2008. In 2010 an upgradient well was sampled to evaluate background conditions. No exceedances for non-nutrient metals were detected. Additional sampling will be required in 2013.

The remedy is functioning as intended. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. Metal ARARs have been met, with the exception of iron, magnesium, manganese, and sodium. The historic exceedances of iron, magnesium, manganese, and sodium are not increasing in concentration. In addition, the elevated iron, manganese, and sodium concentrations could be attributed to naturally occurring conditions due to detections found in the upgradient well. There have been no changes in the toxicity factors for the COC and chemicals with exceedances since 2004, and there have been no changes to the standardized risk assessment methodology that could affect the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

CLEANUP/EXIT STRATEGY

Perform annual inspections, groundwater monitoring every five years, and site maintenance.

Site ID: WSTPT-07A
Site Name: STADIUM LOT F LANDFILL

STATUS

Regulatory Driver: RCRA

RRSE: MEDIUM

Contaminants of Concern: Metals

Media of Concern: Groundwater, Surface Water

Phases	Start	End
RFA	199011	199104
CS	199107	199407
RFI/CMS	199408	199608
DES	199609	200004
IRA	199510	199707
CMI(C)	199901	200107
LTM	200109	204309

RIP Date: N/A

RC Date: 200107

SITE DESCRIPTION

The Michie Stadium Lot F Landfill, part of the six-landfill investigation report, is located southwest of Michie Stadium; access is from Stony Lonesome Road. This 2.8-acre landfill was used primarily in 1965. The pit and trench methods were used. The landfill is closed and paved. A storm water upgrade project and leachate collection was completed in FY01. The site is now used as a parking lot. In FY03 leachate seep investigations and repair of blanket drains (BDs), BD-1 and BD-2, were completed. The site is scheduled to be resurfaced in 2013.

The Michie Stadium Lot F Landfill has been included in USAG-WP's sampling and analysis plan for LTM and maintenance, and annual groundwater sampling was required at this site.

As a result of the 2010 five-year review, in 2012 West Point proposed reducing sampling of all West Point IRP landfills to every five years. The NYSDEC agreed, however sampling would be conducted at the halfway point (2.5 years) if the five year sample showed a regulatory exceedance of non-nutrient TAL metals. Inspections are required annually.

Groundwater monitoring was last conducted in 2011. No exceedances of non-nutrient metals were detected. Additional sampling will be required in 2016.

The remedy is functioning as intended. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. Metal ARARs have been met, with the exception of iron, manganese, and sodium. The historic exceedances of iron, manganese, and sodium appear to be decreasing in concentration and could be attributed to naturally occurring conditions due to detections found in the upgradient well. There have been no changes in the toxicity factors for the COC and chemicals with exceedances since 2004, and there have been no changes to the standardized risk assessment methodology that could affect the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

CLEANUP/EXIT STRATEGY

Perform annual inspections, groundwater monitoring every five years, and site maintenance.

Site ID: WSTPT-09
Site Name: SKI SLOPE LANDFILL

STATUS

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Metals

Media of Concern: Groundwater, Surface Water

Phases	Start	End
RFA	199011	199104
CS	199107	199407
RFI/CMS	199408	199608
DES	199709	199905
IRA	199604	199604
CMI(C)	200009	200107
LTM	200109	204309

RIP Date: N/A

RC Date: 200107

SITE DESCRIPTION

The Ski Slope Landfill, WSTPT-09, part of the six-landfill project, is located adjacent to the ski lodge; access is from New York State Route 218. This 1.9-acre landfill was used from about 1965 through 1974. The pit and area methods were used for disposal of sanitary and construction wastes. The landfill is closed and completely paved and the site is now used as a parking lot. In FY00 a leachate collection system was installed. Sediments in an adjacent stream have been discolored by leachate. Although leachate seeps have been identified at this site in the past, recent engineering inspections have not detected any.

In FY01, cap and drainage system improvements were constructed and completed. In FY05 a seepage collection pipe was installed to reduce seepage emanating to the surface. The site is scheduled to be resurfaced in 2013.

WSTPT-09 has been included in USAG-WP's sampling and analysis plan for LTM and maintenance, and groundwater sampling is conducted at this site. In FY07, USAG-WP proposed, and the state agreed to, a sampling frequency reduced to every five years. As a result of the 2010 five-year review, in 2012 West Point proposed reducing sampling of all West Point IRP landfills to every five years. The NYSDEC agreed, however sampling would be conducted at the halfway point (2.5 years) if the five year sample showed a regulatory exceedance of non-nutrient TAL metals. Inspections are required annually.

Groundwater monitoring was last conducted in 2008. In 2010 an upgradient well was sampled to evaluate background conditions. No exceedances for non-nutrient metals were detected. Additional sampling will be required in 2013.

The remedy is functioning as intended. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. Metal ARARs have been met, with the exception of iron, manganese, and sodium. The exceedances of iron, manganese, and sodium, are not increasing in concentration and could be attributed to naturally occurring conditions due to detections found in the upgradient well. There have been no changes in the toxicity factors for the COC and chemicals with exceedances since 2004, and there have been no changes to the standardized risk assessment methodology that could affect the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

CLEANUP/EXIT STRATEGY

Perform annual inspections, groundwater monitoring every five years, and site maintenance.

Site ID: WSTPT-10
Site Name: POST SCHOOL LANDFILL

STATUS

Regulatory Driver: RCRA

RRSE: MEDIUM

Contaminants of Concern: Metals

Media of Concern: Groundwater, Surface Water

Phases	Start	End
RFA	199011	199104
CS	199107	199407
RFI/CMS	199408	199608
DES	199609	199708
IRA	199603	199604
CMI(C)	199709	199905
LTM	200109	204309

RIP Date: N/A

RC Date: 199905

SITE DESCRIPTION

The Post School Landfill, which was part of the six-landfill investigation report, is located adjacent to the West Point Elementary School. Access is from the school parking lot or Barry Road. This 2.8-acre landfill was used from about 1964 through 1969. The pit and area methods were used. The landfill is closed and vegetated. The site is used as a playing field for the school and youth activities center. Although leachate seeps have been identified at this site in the past, recent engineering inspections have not detected any.

Sediments in an adjacent stream have been discolored by leachate. In 1998 a leachate collection tank was installed and upgraded. The perimeter drainage swale and leachate collection system have been upgraded as an interim RA. A cap and drainage improvement design was finalized in FY97 and implemented in FY98.

The Post School Landfill has been included in USAG-WP's sampling and analysis plan for LTM, and maintenance is conducted at this site. LTM includes groundwater monitoring, drainage swale cleaning, and cap monitoring well maintenance.

In FY07, USAG-WP proposed, and the state agreed to, a sampling frequency reduced to every five years. As a result of the 2010 five-year review, in 2012 West Point proposed reducing sampling of all West Point IRP landfills to every five years. The NYSDEC agreed, however sampling would be conducted at the halfway point (2.5 years) if the five year sample showed a regulatory exceedance of non-nutrient TAL metals. Inspections are required annually.

Groundwater monitoring was last conducted in 2008. In 2010 an upgradient well was sampled to evaluate background conditions. No exceedances for non-nutrient metals were detected. Additional sampling will be required in 2013.

The remedy is functioning as intended. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. Metal ARARs have been met, with the exception of iron and manganese. The exceedances of iron and manganese are not increasing in concentration and the elevated iron could be attributed to naturally occurring conditions due to detections found in the upgradient well. There have been no changes in the toxicity factors for the COC and chemicals with exceedances since 2004, and there have been no changes to the standardized risk assessment methodology that could affect the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

CLEANUP/EXIT STRATEGY

Perform annual inspections, groundwater monitoring every five years, and site maintenance.

Site ID: WSTPT-11
Site Name: MOTORPOOL LANDFILL

STATUS

Regulatory Driver: RCRA

RRSE: MEDIUM

Contaminants of Concern: Metals, Petroleum, Oil and Lubricants (POL)

Media of Concern: Groundwater, Surface Water

Phases	Start	End
RFA	199011	199104
CS	199107	199407
RFI/CMS	199408	199807
DES	199709	199808
CMI(C)	199902	200103
LTM	200109	204309

RIP Date: N/A

RC Date: 200103

SITE DESCRIPTION

The Motor Pool Landfill is part of the six-landfill investigation report. Originally the site of West Point's motor pool, the USMA Prep School (USMAPS) was relocated to the site from Ft Monmouth in 2010. This 4.5-acre landfill was used from about 1964 through 1969. The pit and fill method was used for disposal of sanitary refuse. Originally capped with asphalt and used as a parking lot, a new synthetic cap with leachate and gas collection was installed in 2010 to allow construction of the USMAPS. There are now barracks and academic buildings along the boundary with athletic fields on the landfill. All costs associated with the new cap were funded by Environmental Restoration, Army (ER,A). The new cap meets final closure requirements in accordance with New York Codes Rules and Regulations (NYCRR) 360 regulations.

Leachate seeps have been identified at this site in the past. In FY01 a leachate collection system was installed to remedy a seep downgradient of the landfill. Engineering inspections identified that the seep in the vicinity of monitoring well 95LS-02 increased and in FY03 additional investigation into the source of the seep was performed. The results of the investigation confirmed that the existing leachate collection system was inadequate and in FY06 the leachate collection system was upgraded.

In FY07, USAG-WP proposed, and the state agreed to, a sampling frequency reduced to every five years. Since a new cap was installed in 2010 the NYSDEC required compliance with standard quarterly municipal landfill monitoring requirements for the first five years after the cap is installed; however, since USAG-WP has a history of groundwater monitoring results for this landfill the NYSDEC agreed to only require groundwater monitoring once per year. The four groundwater wells at the site must be analyzed for baseline parameters. One leachate sample must be collected from the leachate collection system at the toe of the landfill slope and analyzed for expanded parameters. This is an increase over the previous requirement to sample one well every five years at this site.

Groundwater monitoring conducted in 2011 showed no exceedances of non-nutrient metals.

The remedy is functioning as intended. Physical conditions or land use at the site that would result in the development of new exposure pathways to human or ecological receptors include the removal of the asphalt parking lot and construction of athletic fields for the college preparatory school being built. Metal ARARs have been met, with the exception of iron, magnesium, manganese, and sodium. The exceedances of iron, magnesium, manganese, and sodium are not increasing in concentration. In addition, the elevated iron and sodium concentrations could be attributed to naturally occurring conditions due to detections found in the upgradient well. There have been no changes in the toxicity factors for the COC and chemicals with exceedances since 2004, and there have been no change to the standardized risk assessment methodology that could affect the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

Site ID: WSTPT-11
Site Name: MOTORPOOL LANDFILL

CLEANUP/EXIT STRATEGY

Annual groundwater monitoring is conducted at this landfill for routine, baseline, and expanded parameters at 6 NYCRR 360-2.11.

Perform annual inspections and site maintenance.

Site ID: WSTPT-15B
Site Name: HIGH SCHOOL LANDFILL

STATUS

Regulatory Driver: RCRA

RRSE: MEDIUM

Contaminants of Concern: Metals

Media of Concern: Groundwater, Surface Water

Phases	Start	End
RFA	199011	199104
CS	199408	199509
LTM	200109	204309

RIP Date: N/A

RC Date: 199603

SITE DESCRIPTION

The High School Landfill, which was part of the 10-landfill investigation report, is located on land deeded to the Highland Falls School District (approximately five miles from the main post). Access is from Morgan Farm Road and Route 9W. The landfill consists of two separate fill areas: the playing field, west of the school building, and the track, southeast of the school building.

Although the landfill is located on land deeded to the Highland Falls School District, West Point, as the primary responsible party for disposal of waste at the landfill, is required to maintain the site in the IRP LTM program. In FY04, due to settling, half the landfill was brought back up to grade. Negotiations with the state resulted in an agreement to terminate groundwater monitoring at this site in FY07. Inspections are conducted annually.

The remedy is functioning as intended. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. Metal ARARs have all been met, and the High School Landfill has been subsequently been removed from the groundwater sampling program with the approval of the NYSDEC. There have been no changes in the toxicity factors for the COC since 2004, and there have been no changes to the standardized risk assessment methodology that could affect the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

CLEANUP/EXIT STRATEGY

Perform annual inspections and site maintenance.

Site ID: WSTPT-16
Site Name: ORGANIC COMPOST LOT

STATUS

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Metals, Nitrate/Nitrite

Media of Concern: Groundwater, Surface Water

Phases	Start	End
RFA	199011	199104
CS	199107	199609
IRA	199103	199103
LTM	200109	204309

RIP Date: N/A

RC Date: 199609

SITE DESCRIPTION

The Organic Compost Landfill was part of the six-landfill investigation report and is located northwest of Building 743; access is from Garrard Road. This half-acre landfill was used in the 1960s to dispose of construction debris. More recently, the site was used for composting organic material including leaves, mulch, tree limbs and grass cuttings. The landfill is closed and is currently used as a lumber storage yard. A leachate tank was installed at the site. The landfill cover was initially tar and chip, but was resurfaced with asphalt in FY05. Although leachate seepage has been identified at this site in the past, recent engineering inspections have not detected any. Erosion damage on the top and slope of the landfill is scheduled to be repaired in 2013.

Groundwater monitoring was originally required annually. As a result of the 2010 five-year review, in 2012 West Point proposed reducing sampling of all West Point IRP landfills to every five years. The NYSDEC agreed, however sampling would be conducted at the halfway point (2.5 years) if the five year sample showed a regulatory exceedance of non-nutrient TAL metals. Inspections are required annually.

An upgradient well was sampled in 2010 to evaluate background conditions. Groundwater monitoring was last conducted in 2011. Exceedances for chromium were detected. Additional sampling will be required in 2013.

The remedy is functioning as intended. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. Metal ARARs have been met, with the exception of chromium (III), iron and sodium. The exceedances of chromium (III), iron and sodium are not increasing in concentration. In addition, the elevated iron and sodium could be attributed to naturally occurring conditions due to detections found in the upgradient well. There have been no changes in the toxicity factors for the COC and chemicals with exceedances since 2004, and there have been no changes to the standardized risk assessment methodology that could affect the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

CLEANUP/EXIT STRATEGY

Perform annual inspections, groundwater monitoring every five years, and site maintenance.

Site ID: WSTPT-35A
Site Name: CAMP BUCKNER LANDFILL

STATUS

Regulatory Driver: RCRA

RRSE: HIGH

Contaminants of Concern: Metals

Media of Concern: Groundwater, Surface Water

Phases	Start	End
RFA	199011	199104
CS	199208	199506
RFI/CMS	199604	199912
LTM	200109	204309

RIP Date: N/A

RC Date: 199912

SITE DESCRIPTION

The Camp Buckner Landfill was part of the 10-landfill investigation report and is located in the reservation area of the installation, at Camp Buckner. Access is from Patton Road, the main road into Camp Buckner, which intersects with Route 293. This 1.3-acre landfill was used in the 1970s and was composed of construction and demolition debris. There are two small ponds north of the landfill; one is adjacent to the landfill and the other is approximately 150 feet away. The landfill is closed and covered with packed gravel and stone. The site is now used as a parking lot. In FY04, due to settling, the landfill was brought back up to grade.

The Camp Buckner Landfill has been included in USAG-WP's sampling and analysis plan for LTM and maintenance, and groundwater sampling is conducted at this site. In FY07, USAG-WP proposed, and the state agreed to, a sampling frequency reduced to every five years. As a result of the 2010 five-year review, in 2012 West Point proposed reducing sampling of all West Point IRP landfills to every five years. The NYSDEC agreed, however sampling would be conducted at the halfway point (2.5 years) if the five-year sample showed a regulatory exceedance of non-nutrient TAL metals. Inspections are required annually.

Groundwater monitoring was last conducted in 2008. An upgradient well was sampled in 2010 to evaluate background conditions. No exceedances for non-nutrient metals were detected. Additional sampling will be required in 2013.

The remedy is functioning as intended. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. Metal ARARs have been met, with the exception of iron and manganese. The exceedances of iron and manganese are not increasing in concentration and could be attributed to naturally occurring conditions due to detections found in the upgradient well. There have been no changes in the toxicity factors for the COCs and chemicals with exceedances since 2004, and there have been no changes to the standardized risk assessment methodology that could affect the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

CLEANUP/EXIT STRATEGY

Perform annual inspections, groundwater monitoring every five years, and site maintenance.

Site ID: WSTPT-48
Site Name: BLDG.706 PARKING LOT LANDFILL

STATUS

Regulatory Driver: RCRA

RRSE: MEDIUM

Contaminants of Concern: Metals

Media of Concern: Groundwater, Surface Water

Phases	Start	End
RFA	199409	199609
LTM	200109	204309

RIP Date: N/A

RC Date: 199609

SITE DESCRIPTION

The Building 706 Parking Lot Landfill, which was part of the four-landfill investigation report, is located next to Building 706 (maintenance facility); access is from Stony Lonesome Road. The period of use is unknown, but based on surrounding sites (Michie Stadium Lots A-C) it is probably between 1952 and 1956. The one-acre landfill is now closed, paved and used as a parking lot. In FY01 the landfill was resurfaced. The Building 706 Parking Lot Landfill has been included in USAG-WP's sampling and analysis plan for LTM and maintenance, and groundwater sampling is conducted at this site. In FY06 slope and embankment stabilization was accomplished. In FY07, USAG-WP proposed, and the state agreed to, a sampling frequency reduced to every five years. As a result of the 2010 five-year review, in 2012 West Point proposed reducing sampling of all West Point IRP landfills to every five years. The NYSDEC agreed, however sampling would be conducted at the halfway point (2.5 years) if the five- year sample showed a regulatory exceedance of non-nutrient TAL metals. Inspections are required annually.

Groundwater monitoring was last conducted in 2011. Exceedances for chromium were detected. Additional sampling will be required in 2013.

The remedy is functioning as intended. There have been no changes in the physical conditions of the site that would affect the protectiveness of the remedy. Based on data collected during the last five-year review sodium, chromium, and iron are the only analytes that exceed screening levels. The elevated iron could be attributed to naturally occurring conditions due to detections found in the upgradient well and elevated sodium concentrations are most likely attributable to the use of salt during the winter months. Chromium has been detected three times since monitoring began. Chromium levels will be monitored to determine what trends, if any, are surfacing as the sampling program continues. There have been no changes in the toxicity factors for the COC and chemicals with exceedances since 2004, and there have been no changes to the standardized risk assessment methodology that could affect the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

CLEANUP/EXIT STRATEGY

Perform annual inspections, groundwater monitoring every five years, and site maintenance.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
PBA@USMA	PBA at USMA	201303	PBA fully funded
WSTPT-07B	STADIUM LOT G LANDFILL	198412	Landfill (LF) contains clean construction fill per geotechnical exploration.
WSTPT-07C	STADIUM LOT H LANDFILL	199011	LF contains clean construction fill. No cleanup required.
WSTPT-08	PROFESSOR'S ROW LANDFILL	199506	Could not locate site during CS in 1995.
WSTPT-11A	MOTORPOOL EAST LANDFILL	201109	Letter received from NYSDEC 18 May 2010
WSTPT-12	SOUTH FILL	198412	No contamination found during confirmatory sampling (CS).
WSTPT-12A	WASHINGTON GATE LANDFILL	199610	No contamination found during RCRA Facility Assessment (RFA).
WSTPT-13	VILLAGE FARM LANDFILL	199809	Contaminated soil removal completed in 1998.
WSTPT-14	CRAGSTON LANDFILL	199104	Not eligible for ER,A funding. This site was closed using Installation Operation and Maintenance Account Environmental funding.
WSTPT-15A	MORGAN FARM LANDFILL	199605	Site consolidated into WSTPT-14.
WSTPT-23A	HOSPITAL PARKING LOT LANDFILL	198412	LF contains clean construction fill. No cleanup required.
WSTPT-44	SKEET AND TRAP RANGE	199801	Lead contamination remediated by natural attenuation.
WSTPT-45	CROW'S NEST AREA	199404	Drums, tanks and bulk containers removed in 1994.
WSTPT-47	ASP LANDFILL	199703	No contamination found during CS.
WSTPT-49	USTS AT BUILDING 505	199412	Based on Tank Closure Report for USTs Across from Building 505, USAMA 1994; UST removal completed in 1994.
WSTPT-50	BLDG. 632 NAPTHA TANKS	199409	UST removal completed in 1994.

IRP Schedule

Date of IRP Inception: 198404

Past Phase Completion Milestones

1985	
CS	(WSTPT-12 - SOUTH FILL, WSTPT-23A - HOSPITAL PARKING LOT LANDFILL, WSTPT-45 - CROW'S NEST AREA)
RFA	(WSTPT-07B - STADIUM LOT G LANDFILL, WSTPT-07C - STADIUM LOT H LANDFILL, WSTPT-12 - SOUTH FILL, WSTPT-23A - HOSPITAL PARKING LOT LANDFILL, WSTPT-44 - SKEET AND TRAP RANGE, WSTPT-45 - CROW'S NEST AREA)
1991	
PA	(PBA@USMA - PBA at USMA)
IRA	(WSTPT-16 - ORGANIC COMPOST LOT)
CS	(WSTPT-07C - STADIUM LOT H LANDFILL)
RFA	(WSTPT-01 - PXLANDFILL, WSTPT-02 - STADIUM LOT A LANDFILL, WSTPT-03 - STADIUM LOT B LANDFILL, WSTPT-04 - STADIUM LOT C LANDFILL, WSTPT-05 - STADIUM LOT D LANDFILL, WSTPT-06 - STADIUM LOT E LANDFILL, WSTPT-07A - STADIUM LOT F LANDFILL, WSTPT-08 - PROFESSOR'S ROW LANDFILL, WSTPT-09 - SKI SLOPE LANDFILL, WSTPT-10 - POST SCHOOL LANDFILL, WSTPT-11 - MOTORPOOL LANDFILL, WSTPT-13 - VILLAGE FARM LANDFILL, WSTPT-14 - CRAGSTON LANDFILL, WSTPT-15A - MORGAN FARM LANDFILL, WSTPT-15B - HIGH SCHOOL LANDFILL, WSTPT-16 - ORGANIC COMPOST LOT, WSTPT-35A - CAMP BUCKNER LANDFILL, WSTPT-47 - ASP LANDFILL)
1993	
ISC	(WSTPT-50 - BLDG. 632 NAPTHA TANKS)
CS	(WSTPT-44 - SKEET AND TRAP RANGE)
1994	
RFI/CMS	(WSTPT-45 - CROW'S NEST AREA)
ISC	(WSTPT-49 - USTS AT BUILDING 505)
CS	(WSTPT-05 - STADIUM LOT D LANDFILL, WSTPT-07A - STADIUM LOT F LANDFILL, WSTPT-09 - SKI SLOPE LANDFILL, WSTPT-10 - POST SCHOOL LANDFILL, WSTPT-11 - MOTORPOOL LANDFILL)
IRA	(WSTPT-45 - CROW'S NEST AREA)
IMP(C)	(WSTPT-49 - USTS AT BUILDING 505, WSTPT-50 - BLDG. 632 NAPTHA TANKS)
1995	
DES	(WSTPT-15A - MORGAN FARM LANDFILL)
CS	(WSTPT-01 - PXLANDFILL, WSTPT-02 - STADIUM LOT A LANDFILL, WSTPT-03 - STADIUM LOT B LANDFILL, WSTPT-04 - STADIUM LOT C LANDFILL, WSTPT-06 - STADIUM LOT E LANDFILL, WSTPT-08 - PROFESSOR'S ROW LANDFILL, WSTPT-13 - VILLAGE FARM LANDFILL, WSTPT-15B - HIGH SCHOOL LANDFILL, WSTPT-35A - CAMP BUCKNER LANDFILL)
RFI/CMS	(WSTPT-15A - MORGAN FARM LANDFILL)
1996	
IRA	(WSTPT-09 - SKI SLOPE LANDFILL, WSTPT-10 - POST SCHOOL LANDFILL)
RFI/CMS	(WSTPT-05 - STADIUM LOT D LANDFILL, WSTPT-07A - STADIUM LOT F LANDFILL, WSTPT-09 - SKI SLOPE LANDFILL, WSTPT-10 - POST SCHOOL LANDFILL, WSTPT-44 - SKEET AND TRAP RANGE)
RFA	(WSTPT-11A - MOTORPOOL EAST LANDFILL, WSTPT-12A - WASHINGTON GATE LANDFILL, WSTPT-48 - BLDG.706 PARKING LOT LANDFILL)
CS	(WSTPT-16 - ORGANIC COMPOST LOT, WSTPT-47 - ASP LANDFILL)
CMI(C)	(WSTPT-15A - MORGAN FARM LANDFILL)
1997	
IRA	(WSTPT-07A - STADIUM LOT F LANDFILL)
DES	(WSTPT-10 - POST SCHOOL LANDFILL, WSTPT-44 - SKEET AND TRAP RANGE)
RFI/CMS	(WSTPT-02 - STADIUM LOT A LANDFILL, WSTPT-03 - STADIUM LOT B LANDFILL, WSTPT-04 - STADIUM LOT C LANDFILL, WSTPT-06 - STADIUM LOT E LANDFILL, WSTPT-13 - VILLAGE FARM LANDFILL)
1998	
DES	(WSTPT-11 - MOTORPOOL LANDFILL, WSTPT-13 - VILLAGE FARM LANDFILL)

RFI/CMS	(WSTPT-11 - MOTORPOOL LANDFILL)
CMI(C)	(WSTPT-13 - VILLAGE FARM LANDFILL, WSTPT-44 - SKEET AND TRAP RANGE)
1999	
RFI/CMS	(WSTPT-11A - MOTORPOOL EAST LANDFILL)
DES	(WSTPT-09 - SKI SLOPE LANDFILL)
CMI(C)	(WSTPT-10 - POST SCHOOL LANDFILL)
2000	
RFI/CMS	(WSTPT-01 - PXLANDFILL, WSTPT-35A - CAMP BUCKNER LANDFILL)
DES	(WSTPT-04 - STADIUM LOT C LANDFILL, WSTPT-06 - STADIUM LOT E LANDFILL, WSTPT-07A - STADIUM LOT F LANDFILL)
2001	
CMI(C)	(WSTPT-04 - STADIUM LOT C LANDFILL, WSTPT-06 - STADIUM LOT E LANDFILL, WSTPT-07A - STADIUM LOT F LANDFILL, WSTPT-09 - SKI SLOPE LANDFILL, WSTPT-11 - MOTORPOOL LANDFILL, WSTPT-11A - MOTORPOOL EAST LANDFILL)
DES	(WSTPT-02 - STADIUM LOT A LANDFILL, WSTPT-03 - STADIUM LOT B LANDFILL, WSTPT-11A - MOTORPOOL EAST LANDFILL)
2002	
CMI(C)	(WSTPT-02 - STADIUM LOT A LANDFILL, WSTPT-03 - STADIUM LOT B LANDFILL)
2011	
LTM	(WSTPT-11A - MOTORPOOL EAST LANDFILL)

Projected Phase Completion Milestones

See attached schedule

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

Site ID	Site Name	ROD/DD Title	ROD/DD Date

Final RA(C) Completion Date: 200207

Schedule for Next Five-Year Review: N/A

Estimated Completion Date of IRP at Installation (including LTM phase): 204309

WEST POINT MIL RESERVATION IRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
WSTPT-01	PXLANDFILL	LTM						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
WSTPT-02	STADIUM LOT A LANDFILL	LTM						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
WSTPT-03	STADIUM LOT B LANDFILL	LTM						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
WSTPT-04	STADIUM LOT C LANDFILL	LTM						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
WSTPT-05	STADIUM LOT D LANDFILL	LTM						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
WSTPT-06	STADIUM LOT E LANDFILL	LTM						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
WSTPT-07A	STADIUM LOT F LANDFILL	LTM						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
WSTPT-09	SKI SLOPE LANDFILL	LTM						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
WSTPT-10	POST SCHOOL LANDFILL	LTM						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
WSTPT-11	MOTORPOOL LANDFILL	LTM						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
WSTPT-15B	HIGH SCHOOL LANDFILL	LTM						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
WSTPT-16	ORGANIC COMPOST LOT	LTM						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
WSTPT-35A	CAMP BUCKNER LANDFILL	LTM						
SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
WSTPT-48	BLDG.706 PARKING LOT LANDFILL	LTM						

WEST POINT MIL RESERVATION

Army Defense Environmental Restoration Program
Military Munitions Response Program

MMRP Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 22/8

Installation Site Types with Future and/or Underway Phases

14 Unexploded Munitions/Ordnance

(WSTPT-001-R-01, WSTPT-004-R-01, WSTPT-004-R-02, WSTPT-008-R-01, WSTPT-010-R-01, WSTPT-011-R-01, WSTPT-013-R-01, WSTPT-015-R-01, WSTPT-016-R-01, WSTPT-017-R-01, WSTPT-019-R-01, WSTPT-020-R-01, WSTPT-022-R-01, WSTPT-023-R-01)

Most Widespread Contaminants of Concern

Munitions and explosives of concern (MEC), Munitions constituents (MC)

Media of Concern

Groundwater, Sediment, Soil, Surface Water

Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY
PBA@MR USMA	PBA for MMRP at USMA	IRA	INSTITUTIONAL CONTROLS	2012

Duration of MMRP

Date of MMRP Inception 200212

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201906/201906

Date of MMRP completion including Long Term Management (LTM): 204906

MMRP Contamination Assessment

Contamination Assessment Overview

In FY03, the Phase 3 Army Range Inventory at West Point was completed. The inventory identified 12 sites as eligible for the Military Munitions Response Program (MMRP). The phase 3 inventory serves as the PA under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). In May 2004 a SI began; it was completed in January 2007. The RI/feasibility study (FS) was initiated in FY10 at all sites except the Hudson River sites (WSTPT-004-R-01 and WSTPT-016-R-01).

Cleanup Exit Strategy

See individual sites for the cleanup exit strategies.

MMRP Previous Studies

	Title	Author	Date
2003			
	Phase 3 Army Closed, Transferring & Transferred Ranges/Sites Inventory for West Point Military Reservation	Malcolm Pirnie, Inc.	AUG-2003
2006			
	Final Historical Records Review Report United States Military Academy West Point, New York	TLI Solutions	MAR-2006
	Work Plan for the Historical Records Review, United States Military Academy West Point, New York	TLI Solutions	APR-2006
2007			
	Final Site Inspection Report United States Military Academy West Point, New York	TLI Solutions	JAN-2007

WEST POINT MIL RESERVATION

Military Munitions Response Program

Site Descriptions

Site ID: WSTPT-001-R-01
Site Name: ARTILLERY FIRING RANGE

STATUS

Regulatory Driver: CERCLA

MRSPP Score: 05

Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	200212	200308
SI	200405	200701
RI/FS	201004	201605
LTM	201606	204605

RIP Date: N/A

RC Date: 201605

SITE DESCRIPTION

The Artillery Firing Range consists of 172.4 acres and is comprised of three overlapping former artillery ranges: Sacred Heart Cemetery Range, the Silver Depository Range, and the Adolphs Pond Range. The munitions response site (MRS) includes three parcels of land located to the south and west of the main campus. The two northern parcels of the MRS are adjacent to each other and the third is a noncontiguous parcel located to the south. The northeastern portions of the historic artillery ranges extend beyond the installation boundary into the Crows Nest Impact Area MRS. In addition, a portion of the eastern edges of the Sacred Heart Cemetery Range and the Adolphs Pond Range are located within the Fort Clinton and Siege Battery MRSs and their northeastern corners extend over the Hudson River and make up a portion of the Siege Battery-Transferred (TD) MRS. Portions of the firing fans associated with the Lusk Reservoir and Redoubt No. 2 MRSs are also contained within the Artillery Firing Range MRS. Recovered items from an intrusive investigation of this area conducted during an engineering evaluation/cost analysis (EE/CA) in July 2002 included unexploded ordnance (UXO), OE scrap, and non-OE scrap. Items found included 75 millimeter (mm) projectiles, six-inch MK 34 projectiles, 16-inch cannon balls, inert powder train time fuse 1907-M fuses, 75mm high explosives (HE), and ejection rounds and fuses.

In support of a Base Realignment and Closure (BRAC) action to relocate the USMAPS from Fort Monmouth to USAG-WP, a removal action was executed on four acres of this site. The motor pool was demolished and replaced with barracks and academic and athletic facilities. Construction support was provided during the intrusive ground work phase of this project.

During the removal action, no MEC items were discovered and no samples were collected to test for MC. A total of four practice grenades and approximately 90 M1909 cartridge cases, one each expended ground signal, a parachute, one-third of a 37mm, LE practice projectile, and a nose piece (fragment) from a projectile were located.

During construction of the new USMAPS a 3-in stokes mortar and 8-inch (in) projectile circa 1851 were discovered and disposed of by explosive ordnance disposal (EOD).

It is assumed that the FS will recommend LTM for this site and the 11 original land based MRSs. For ease of tracking, LTM for these 11 sites is tracked on this site.

CLEANUP/EXIT STRATEGY

An RI is underway and an FS will be completed.

Site ID: WSTPT-004-R-01
Site Name: BATTERY KNOX-TD-RIVER MRS

STATUS

Regulatory Driver: CERCLA

MRSPP Score: 05

Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)

Media of Concern: Sediment, Surface Water

Phases	Start	End
PA	200212	200308
SI	200405	200701
RI/FS	201410	201906
LTM	201907	204906

RIP Date: N/A

RC Date: 201906

SITE DESCRIPTION

The Battery Knox-TD-River MRS encompasses 73 acres on the Hudson River. Battery Knox contained six gun positions and ammunition magazines. The battery was established sometime between 1836 and 1850. In 1874 the battery was redesigned, with modifications made to the armament and the orientation of the guns to improve their defensibility and their ability to cover the river with firepower. By 1892, Battery Knox was armed with one 100-pounder Parrott 6.4-in caliber rifle, one 300-pounder Parrott 10-in caliber rifle, one eight-in converted rifle, and four 10-in Rodman rifles. Firing from the battery was conducted to the east towards targets that were placed in the Hudson River. The battery was demolished during the World War II (WWII) era. No previous investigations into the presence of MEC or MC within the Hudson River have been conducted.

It is assumed that the FS will recommend LTM for this site and the other water based MRS (WSTPR-016-R-01). For ease of tracking, LTM for these 2 sites is tracked on this site.

CLEANUP/EXIT STRATEGY

The RI/FS phase is planned.

Site ID: WSTPT-004-R-02
Site Name: BATTERY KNOX-TD-LAND MRS

STATUS

Regulatory Driver: CERCLA

MRSPP Score: 05

Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	200212	200308
SI	200405	200701
RI/FS	201004	201605

RIP Date: N/A

RC Date: 201605

SITE DESCRIPTION

The Battery Knox-TD-Land MRS encompasses 141 acres located across the Hudson River on the eastern bank in Putnam County. Battery Knox contained six gun positions and ammunition magazines. The battery was established sometime between 1836 and 1850 and in 1874 it was redesigned with modifications to the armament and the orientation of the guns to improve their defensibility and their ability to cover the river with firepower. By 1892, Battery Knox was armed with one 100-pounder Parrott 6.4-in caliber rifle, one 300-pounder Parrott 10-in caliber rifle, one 8-in converted rifle, and four 10-in Rodman rifles. Firing from the battery was conducted to the east towards targets that were placed in the Hudson River; however, projectiles that overshot the targets may have impacted the eastern bank of the Hudson River, which encompasses the land portion of the Battery Knox-TD MRS. The battery was demolished during the WWII era. The eastern bank of the Hudson River includes bluffs and low-lying wetlands. During the SI, no evidence of military activities, including MEC, was identified in the Battery Knox-TD-Land MRS and no MC was identified in the samples at levels above the screening criteria; however, trace amounts of explosives were identified in the samples. Because an explanation for the presence of these trace explosives cannot be determined at this time, the stakeholders have requested that further investigation of this site be performed, including additional soil sampling and possible geophysical investigation.

CLEANUP/EXIT STRATEGY

The RI/FS phase for this site is currently underway.

Site ID: WSTPT-008-R-01
Site Name: FORT CLINTON-WEST

STATUS

Regulatory Driver: CERCLA

MRSPP Score: 04

Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	200212	200308
SI	200405	200701
RI/FS	200910	201605

RIP Date: N/A

RC Date: 201605

SITE DESCRIPTION

The Fort Clinton-West site is comprised of 14.4 acres and extends from the western side of the USAG-WP cemetery, through the Lee Housing Area, to Highway 218 and the Crows Nest Impact Area MRS. Construction of Fort Clinton began on March 12, 1778, on the eastern portion of USAG-WP. The fort was designed to provide fortification for the chain that was placed across the Hudson River. Practice firings were routinely conducted from the fort, which was equipped with brass four-pounder, brass mortars, iron 12-pounder, iron 18-pounder, and 75 mm guns. Through the 1830s the fort was used for artillery training, with firing conducted to the northwest across the Hudson River. From the mid-1800s until 1927, the fort was used for the practice firing of 75 mm guns towards Crows Nest. As of 1927, the site has been a monument and a national historic site.

The firing point of Fort Clinton was located on the top of the bluff to the southwest of Gees Point within the Fort Clinton-East MRS. The direction of fire was to the northwest towards the Crows Nest Area. There are no known impact or target areas within the Fort Clinton MRS. The western portion of the Fort Clinton site includes a part of the Lee Housing Area as well as undeveloped, heavily-wooded terrain. The remainder of the historic range fan is included with Siege Battery, Target Hill and the North Athletic Field. A previous geophysical survey conducted in April 2001 encompassed a portion of the Fort Clinton-West, as well as portions of the Artillery Firing Range and Siege Battery MRSs. Approximately 1,539 subsurface anomalies were identified during this survey. Although the previous study did not specify how many of these anomalies were located within the Fort Clinton-West MRS, the anomalies are assumed to be present within the site.

CLEANUP/EXIT STRATEGY

The RI/FS phase for this site is currently underway.

Site ID: WSTPT-010-R-01
Site Name: GREY GHOST HOUSING AREA

STATUS

Regulatory Driver: CERCLA

MRSPP Score: 05

Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	200212	200308
SI	200405	200701
RI/FS	200910	201605

RIP Date: N/A

RC Date: 201605

SITE DESCRIPTION

The Grey Ghost Housing Area MRS of approximately 24 acres is located in the central campus, west of the batteries and athletic fields. The area is comprised of a range complex that includes a 1,000-in machine gun range and a rifle and pistol range. The firing points for the ranges were located at the northern end of the MRS and the direction of fire was towards the southwest. The targets for the ranges were located within the MRS near the base of a steep, heavily-wooded hill. Operations conducted at the machine gun range occurred from about 1920 to 1940. During this time, the area was used by cadets for small arms training with a variety of weapon types, including .22 and .30 caliber machine guns. In addition, a rifle range was located in the area as early as 1939. After 1950, the area was developed as a housing complex.

CLEANUP/EXIT STRATEGY

The RI/FS phase for this site is currently underway.

Site ID: WSTPT-011-R-01
Site Name: NORTH ATHLETIC FIELD

STATUS

Regulatory Driver: CERCLA

MRSPP Score: 04

Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	200212	200308
SI	200405	200701
RI/FS	200910	201605

RIP Date: N/A

RC Date: 201605

SITE DESCRIPTION

The North Athletic Field MRS is comprised of 14 acres located just to the southwest of the western shore of the Hudson River, within the central campus area of USAG-WP. Maps from 1903 to 1935 delineate the location of target butts assumed to be associated with a rifle range in this area. The 1935 map delineates the target butts located within the area of the North Athletic Field MRS, as well as a 1,000-yard butt located north of the area along the shore of the Hudson River. The location of the firing points for the rifle range is unknown, but probably was in the North Dock area with the direction of firing to the northwest along the shoreline of the Hudson River.

In 1937 the Army started the expansion of the North Athletic Field by removing Target Hill so that the dirt could be used to fill out toward the river and create necessary fields. The removal of dirt from Target Hill began in 1944 and was completed in 1945. Approximately 60,000 square yards of level ground were added to the area comprising the North Athletic Field. Because the North Athletic Field was constructed with fill dirt from Target Hill, the area may contain ordnance that was fired into the hill from the early-1800s until the late-1930s. Target Hill served as the impact area for artillery test-fired from the Cold Spring Foundry and heavy guns located in batteries on the north side of USAG-WP. Munitions associated with training at Target Hill include large caliber HE and practice rounds. In addition, there may be ammunition in the area from the former rifle range at the North Athletic Field. The North Athletic Field MRS currently encompasses several athletic fields including the softball field complex, a track, and a football field. The northern edge of the site is bounded by railroad tracks, a road, and the Hudson River.

CLEANUP/EXIT STRATEGY

An RI is underway and anticipated to be complete in 2016.

Site ID: WSTPT-013-R-01
Site Name: SEACOAST BATTERY

STATUS

Regulatory Driver: CERCLA

MRSPP Score: 05

Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	200212	200308
SI	200405	200701
RI/FS	200910	201605

RIP Date: N/A

RC Date: 201605

SITE DESCRIPTION

The Seacoast Battery MRS is comprised of two acres of land within the boundaries of USAG-WP on Constitution Island. The location of the Seacoast Battery in the North Dock area and the majority of the range fan are incorporated into the Siege Battery and Siege Battery-TD MRSs. Activities that took place on the installation that are associated with the Seacoast Battery MRS included live firing conducted from the Seacoast Battery toward the bluffs on Constitution Island. Munitions used at the Seacoast Battery included large caliber HE and practice rounds, and mortar rounds. The battery also included two brick buildings that contained instruments for measuring the velocity of projectiles and the recoil of guns. The shots were fired from the battery through parallel line wires at the west end of the battery. West of the battery, a small stone structure set into the hillside was used as a bursting chamber in which explosives were tested. The Seacoast Battery was established sometime between 1836 and 1850 and demolished sometime during WWII. The Seacoast Battery MRS is the land area on Constitution Island where the impact of projectiles may have occurred.

CLEANUP/EXIT STRATEGY

An RI is underway and anticipated to be complete in 2016.

Site ID: WSTPT-015-R-01
Site Name: SIEGE BATTERY

STATUS

Regulatory Driver: CERCLA

MRSPP Score: 03

Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	200212	200308
SI	200405	200701
RI/FS	200910	201605

RIP Date: N/A

RC Date: 201605

SITE DESCRIPTION

The Siege Battery MRS is comprised of 179.3 acres and includes two noncontiguous areas. The western portion of the site includes land located on the slope of the hill below the Battle Monument, at what is now called Trophy Point, and extends to the northwest. The eastern portion of the site is located on Constitution Island. A portion of the Siege Battery firing fan overlaps the firing fans of the Seacoast Battery, the Rifle Range, the Artillery Firing Range, and Fort Clinton, as well as the location of the firing point of the Seacoast Battery. Activities that took place on the installation that are associated with the Siege Battery included live firing conducted from the Siege Battery and ammunition storage. Target butts for a 1,000-yard rifle range were also located within the Siege Battery MRS.

During the latter part of the 19th century, the Siege Battery was renamed Battery Schofield and was used for training with Parrott rifles. Various munitions were used at the Siege Battery including a 4.5- inch rifled gun, 30-pounder Parrott guns, 10-in. smooth bore siege mortars, eight-inch smooth bore siege mortars, 5-in. steel breech-loading guns, 7-in. steel breech-loading howitzers, 7-in. steel breech-loading mortars, and 3.2-in. guns. The targets for the guns used at the Siege Battery were on Crows Nest, approximately 2,000 yards distant. Full charges were not used in any of the guns. The targets for the mortars were anchored in the Hudson River.

The Siege Battery was constructed sometime between 1836 and 1860. The Siege Battery was not used after 1906 and 1910, when Battery Schofield came into service. A map from 1939 indicates the Siege Battery and Battery Schofield had been replaced by an amphitheatre. No traces of the Siege Battery survive, but the locations of the two, 6-in. disappearing carriage guns are prominent east of Trophy Point. The Siege Battery and its associated firing fan cover 179 acres within the installation's boundaries. There have not been any documented UXO findings or UXO responses in this area.

CLEANUP/EXIT STRATEGY

An RI is underway and anticipated to be complete in 2016.

Site ID: WSTPT-016-R-01
Site Name: SIEGE BATTERY-TD-RIVER

STATUS

Regulatory Driver: CERCLA

MRSPP Score: 04

Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)

Media of Concern: Sediment, Surface Water

Phases	Start	End
PA	200212	200308
SI	200405	200701
RI/FS	201410	201906

RIP Date: N/A

RC Date: 201906

SITE DESCRIPTION

The Siege Battery-TD-River encompasses 848 acres within the Hudson River. Activities that took place on the installation that are associated with the Siege Battery include live firing conducted from the Siege Battery and ammunition storage. There are no known impact areas within the Siege Battery MRS; however, projectiles that overshot the targets located in the Hudson River may have impacted the Constitution Island portion of the MRS. In addition, target butts for a 1,000-yard rifle range were also located within the Siege Battery MRS. Projectiles that overshot the targets located in the river may have impacted the shore of the Hudson River to the north of the village of Cold Spring.

During the latter part of the 19th century, the Siege Battery was renamed Battery Schofield and was used for training with Parrott rifles. Various munitions were used at the Siege Battery including a 4.5-in. rifled gun, 30-pounder Parrott guns, 10-in. smooth bore siege mortars, 8-in. smooth bore siege mortars, 5-in. steel breech-loading guns, 7-in. steel breech-loading howitzers, 7-in. steel breech-loading mortars, and 3.2-in. guns. The targets for the guns used at the Siege Battery were on Crow¿s Nest, approximately 2,000 yards distant. Full charges were not used in any of the guns. The targets for the mortars were anchored in the Hudson River. Use of the Siege Battery ended between 1906 and 1910, when Battery Schofield came into service. A map from 1939 indicates the Siege Battery and Battery Schofield had been replaced by an amphitheatre. A site inspection was completed in 2007.

CLEANUP/EXIT STRATEGY

The RI/FS phase is planned.

Site ID: WSTPT-017-R-01
Site Name: TARGET HILL

STATUS

Regulatory Driver: CERCLA

MRSPP Score: 05

Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	200212	200308
SI	200405	200701
RI/FS	200910	201605

RIP Date: N/A

RC Date: 201605

SITE DESCRIPTION

The Target Hill MRS is comprised of 14 acres of land located within the USAG-WP campus area north of the athletic fields, near the western bank of the Hudson River. It is bounded on the east by the West Shore Railroad and the Hudson River. This site is surrounded by the Siege Battery and overlaps both the range fans for the Siege Battery and Fort Clinton. Artillery firing toward Target Hill may have begun as early as the War of 1812 with rounds being fired into the hill from the Cold Spring Foundry located across the Hudson River. By 1890, the hill was used as target practice for batteries located along the north side of the installation.

Target Hill continued to be used by USAG-WP cadets for short-range artillery training as an impact area until the late-1930s. Munitions associated with training at Target Hill include large caliber HE and practice rounds. In 1903, 1,000-yard target butts were identified on Target Hill. The firing point associated with these butts was located on Target Flats in the area of the North Athletic Field. Between 1944 and 1945, dirt was removed from Target Hill to level approximately 60,000 square yards of the North Athletic Field. This resulted in the removal of the impact area known as Target Hill. Construction of a new rugby center was completed in 2006 on the northern portion of the Target Hill MRS. The southern portion of the site has been developed with soccer fields. The eastern edge of the site is bordered by a road, railroad tracks, and the Hudson River.

CLEANUP/EXIT STRATEGY

An RI is underway and anticipated to be complete in 2016.

Site ID: WSTPT-019-R-01
Site Name: LUSK RESERVOIR

STATUS

Regulatory Driver: CERCLA

MRSPP Score: 04

Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	200212	200308
SI	200405	200701
RI/FS	200910	201605

RIP Date: N/A

RC Date: 201605

SITE DESCRIPTION

Lusk Reservoir occupies approximately 83 acres in the central portion of the USAG-WP campus. The firing point is located on the east side of Lusk Reservoir. Between 1909 and 1916 firing was in the direction of Crows Nest. There are no known impact areas within the Lusk Reservoir MRS. The firing in 1915 and 1916 was described as subcaliber and service target practice. Weapons used at Lusk Reservoir are probably similar to those identified for use at the Artillery Firing Range and might include 2.95-in Mountain Howitzers, 75 mm gun M1897, 75 mm gun M1907, six-in high capacity gun, 15-in mortars, and 16-in mortars. The majority of the land within the Lusk Reservoir MRS is undeveloped and includes steep, heavily-wooded terrain. The western end of the site has been developed and includes a portion of the Grey Ghost Housing Area and West Point Elementary School. An anomaly investigation and UXO removal was conducted in 2001 and at that time three ordnance or ordnance-related items were identified at the site within the northwest corner of this MRS.

CLEANUP/EXIT STRATEGY

An RI is underway and anticipated to be complete in 2016.

Site ID: WSTPT-020-R-01
Site Name: REDOUBT NO. 2

STATUS

Regulatory Driver: CERCLA

MRSPP Score: 05

Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	200212	200308
SI	200405	200701
RI/FS	200910	201605

RIP Date: N/A

RC Date: 201605

SITE DESCRIPTION

Redoubt No. 2 occupies approximately 20 acres east of the intersection of Highways 218 and 9W and west of Dassori Pond. The firing point is located in the vicinity of historic Redoubt No. 2 and the fan extends to the north to encompass land not addressed by other closed ranges or operational range areas. The range was used from about 1909 to 1916. In 1915 and 1916 field artillery target practice with service ammunition was fired at targets on Crows Nest from a position near Redoubt No. 2. The direction of fire was to the north. There are no known impact areas within the Redoubt No. 2 MRS. Weapons used at Redoubt No. 2 are assumed to be similar to those identified for use at the Artillery Firing Range and might include 2.95-in Mountain Howitzers, 75 mm gun M1897, 75 mm gun M1907, six-in high capacity gun, 15-in mortars, and 16-in mortars. The Redoubt No. 2 MRS is primarily undeveloped and encompasses steep, heavily-wooded terrain. Several roads cross the site and a few buildings are spaced intermittently throughout. The firing point of the range is located south of the Stony Lonesome Housing Area and adjacent to the historic Redoubt No. 2, which is a cultural site. As a result of the geophysical survey, numerous subsurface anomalies were identified at this MRS; however, no MEC or munitions debris was identified during the SI visual survey. Therefore, the recommendation was made that further investigation of the anomalies be conducted at this site to determine if they are related to military munitions.

CLEANUP/EXIT STRATEGY

An RI is underway and anticipated to be complete in 2016.

Site ID: WSTPT-022-R-01
Site Name: MICHIE STADIUM

STATUS

Regulatory Driver: CERCLA

MRSPP Score: 04

Contaminants of Concern: Munitions and explosives of concern (MEC), Munitions constituents (MC)

Media of Concern: Groundwater, Soil

Phases	Start	End
PA	200212	200308
SI	200405	200701
RI/FS	200910	201405
LTM	201406	204407

RIP Date: N/A

RC Date: 201405

SITE DESCRIPTION

The Michie Stadium site occupies approximately 14.1 acres in and around Michie Stadium, which is located near the center of the Main Post and west of Lusk Reservoir. The area originally identified in the SI was limited to 9.5 acres. However, the RI completed in March 2012 expanded the area to 14.1 acres to include additional area around the stadium that appears to contain fill. The stadium was constructed in 1924. There are several athletic complexes in the area surrounding Michie Stadium, including the Holleder Center, Howze Field, the Kimsey Athletic Center, and Randall Hall. During two separate construction projects completed around the stadium in 2001 and 2003, 14 Stokes mortar rounds were identified and disposed of by an EOD unit or the Range Control Office at USAG-WP. During 2001 a seismic upgrade was completed at the west stands of Michie Stadium. This project included adding pilings to the west stands to make them more stable. During this project, five 3-in. MI1 Stokes mortar rounds were found in the area. In September 2003 Randall Hall was constructed between the west stands of Michie Stadium and the Kimsey Athletic Center. During this construction nine additional 9-in. MK1 Stokes mortar rounds were found.

Although several Stokes mortar rounds have been identified in the area around Michie Stadium, when or how the items were brought to the site is unknown. Stokes mortars were used by the Army during World War I (WWI) until just before the beginning of WWII. The mortar rounds found near Michie Stadium do not appear to have been fired; therefore they are assumed to be discarded military munitions. They might have been discarded following training activities that might have occurred in the area or they may have been brought to the site in the fill dirt that was used during the construction of the stadium and surrounding structures. The Michie Stadium MRS has been extensively developed with athletic facilities, parking lots, and roads. A small area along the northern edge of the site includes wooded, hilly terrain.

CLEANUP/EXIT STRATEGY

An RI is underway and anticipated to be complete in 2014. Perform annual inspections, groundwater monitoring every 5 years, and site maintenance.

Site ID: WSTPT-023-R-01
Site Name: CROWS NEST IMPACT AREA

STATUS

Regulatory Driver: CERCLA

MRSPP Score: Evaluation pending

Phases	Start	End
PA	200212	200308
RI/FS	201308	201608

RIP Date: N/A

RC Date: 201608

SITE DESCRIPTION

The Crows Nest Impact area MRS is 615.45 acres. The site consists of the Crows Nest impact area (350.29 acres) and three adjacent training areas J1 (130.40 acres), G1 (101.50 acres), and G2 (33.26 acres). The site is bounded to the north by Storm King State Park, to the west by Black Rock Forest, and to the south by the West Point cantonment.

Until the 1930's Crows Nest was the installations main impact area. Most of the ranges in the MMRP were aimed at Crows Nest. The site may also have been used by the former West Point Foundry in Cold Spring. Just prior to WWII, West Point acquired additional land to the west of Route 9W. Once training shifted to these new areas, the ranges on the Main Post were closed and the Crows Nest impact area was no longer used.

Former training areas J1, G1, and G2 were included in this MRS because evidence of munitions use has been found in areas adjacent to the marked dud zone. Munitions contamination discovered in Storm King State Park in 1999, resulted in a cleanup project by the US Army Corps of Engineers (USACE) thru the Formerly Used Defense Site Program (FUDS). A study completed under West Point's Environmental Restoration Program identified evidence of munitions use west of Crows Nest in training area G1. An MMRP remedial investigation has identified munitions contamination on the Main Post adjacent and south of Crows Nest. The installation of a new natural gas pipeline identified munitions contamination in area J1.

CLEANUP/EXIT STRATEGY

An RI is underway and anticipated to be complete in 2016.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
PBA@MR USMA	PBA for MMRP at USMA	201303	PBA fully funded
WSTPT-003-R-01	BATTERY KNOX	200706	Based on the Final SI dated January 2007, this site was found to have no contamination.
WSTPT-007-R-01	BUFFALO SOLDIER FIELD	200706	Based on the Final SI dated January 2007, this site was found to have no contamination.
WSTPT-008-R-02	FORT CLINTON-EAST	200706	Based on the Final SI dated January 2007, this site was found to have no contamination.
WSTPT-012-R-01	POST OUTDOOR PISTOL RANGE	200706	Based on the Final SI dated January 2007, this site was found to have no contamination.
WSTPT-016-R-02	Siege Battery-TD-Land	200706	Based on the Final SI dated January 2007, this site was found to have no contamination.
WSTPT-018-R-01	RANGE NO. 1	200706	Based on the Final SI dated January 2007, this site was found to have no contamination.
WSTPT-021-R-01	Rifle Range	200706	Based on the Final SI dated January 2007, this site was found to have no contamination.

MMRP Schedule

Date of MMRP Inception 200212

Past Phase Completion Milestones

2003

PA	(WSTPT-001-R-01 - ARTILLERY FIRING RANGE, WSTPT-003-R-01 - BATTERY KNOX, WSTPT-004-R-01 - BATTERY KNOX-TD-RIVER MRS, WSTPT-004-R-02 - BATTERY KNOX-TD-LAND MRS, WSTPT-007-R-01 - BUFFALO SOLDIER FIELD, WSTPT-008-R-01 - FORT CLINTON-WEST, WSTPT-008-R-02 - FORT CLINTON-EAST, WSTPT-010-R-01 - GREY GHOST HOUSING AREA, WSTPT-011-R-01 - NORTH ATHLETIC FIELD, WSTPT-012-R-01 - POST OUTDOOR PISTOL RANGE, WSTPT-013-R-01 - SEACOAST BATTERY, WSTPT-015-R-01 - SIEGE BATTERY, WSTPT-016-R-01 - SIEGE BATTERY-TD-RIVER, WSTPT-016-R-02 - Siege Battery-TD-Land, WSTPT-017-R-01 - TARGET HILL, WSTPT-018-R-01 - RANGE NO. 1, WSTPT-019-R-01 - LUSK RESERVOIR, WSTPT-020-R-01 - REDOUBT NO. 2, WSTPT-021-R-01 - Rifle Range, WSTPT-022-R-01 - MICHIE STADIUM, WSTPT-023-R-01 - CROWS NEST IMPACT AREA)

2004

PA	(PBA@MR USMA - PBA for MMRP at USMA)

2007

SI	(PBA@MR USMA - PBA for MMRP at USMA, WSTPT-001-R-01 - ARTILLERY FIRING RANGE, WSTPT-003-R-01 - BATTERY KNOX, WSTPT-004-R-01 - BATTERY KNOX-TD-RIVER MRS, WSTPT-004-R-02 - BATTERY KNOX-TD-LAND MRS, WSTPT-007-R-01 - BUFFALO SOLDIER FIELD, WSTPT-008-R-01 - FORT CLINTON-WEST, WSTPT-008-R-02 - FORT CLINTON-EAST, WSTPT-010-R-01 - GREY GHOST HOUSING AREA, WSTPT-011-R-01 - NORTH ATHLETIC FIELD, WSTPT-012-R-01 - POST OUTDOOR PISTOL RANGE, WSTPT-013-R-01 - SEACOAST BATTERY, WSTPT-015-R-01 - SIEGE BATTERY, WSTPT-016-R-01 - SIEGE BATTERY-TD-RIVER, WSTPT-016-R-02 - Siege Battery-TD-Land, WSTPT-017-R-01 - TARGET HILL, WSTPT-018-R-01 - RANGE NO. 1, WSTPT-019-R-01 - LUSK RESERVOIR, WSTPT-020-R-01 - REDOUBT NO. 2, WSTPT-021-R-01 - Rifle Range, WSTPT-022-R-01 - MICHIE STADIUM)

2012

IRA	(PBA@MR USMA - PBA for MMRP at USMA)

Projected Phase Completion Milestones

See attached schedule

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

To Be Determined

Final RA(C) Completion Date:

Schedule for Next Five-Year Review: N/A

Estimated Completion Date of MMRP at Installation (including LTM phase): 204906

WEST POINT MIL RESERVATION MMRP Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
WSTPT-001-R-01	ARTILLERY FIRING RANGE	RI/FS						
		LTM						
WSTPT-004-R-01	BATTERY KNOX-TD-RIVER MRS	RI/FS						
		LTM						
WSTPT-004-R-02	BATTERY KNOX-TD-LAND MRS	RI/FS						
WSTPT-008-R-01	FORT CLINTON-WEST	RI/FS						
WSTPT-010-R-01	GREY GHOST HOUSING AREA	RI/FS						
WSTPT-011-R-01	NORTH ATHLETIC FIELD	RI/FS						
WSTPT-013-R-01	SEACOAST BATTERY	RI/FS						
WSTPT-015-R-01	SIEGE BATTERY	RI/FS						
WSTPT-016-R-01	SIEGE BATTERY-TD-RIVER	RI/FS						
WSTPT-017-R-01	TARGET HILL	RI/FS						
WSTPT-019-R-01	LUSK RESERVOIR	RI/FS						
WSTPT-020-R-01	REDOUBT NO. 2	RI/FS						
WSTPT-022-R-01	MICHIE STADIUM	RI/FS						
		LTM						
WSTPT-023-R-01	CROWS NEST IMPACT AREA	RI/FS						

WEST POINT MIL RESERVATION

Army Defense Environmental Restoration Program
Compliance Restoration

CR Summary

Installation Total Army Environmental Database-Restoration (AEDB-R) Sites/Closeout Sites Count: 2/1

Installation Site Types with Future and/or Underway Phases

1 Soil Contamination After Tank Removal (CCUST1230)

Most Widespread Contaminants of Concern

Petroleum, Oil and Lubricants (POL), Volatiles (VOC)

Media of Concern

Soil

Completed Remedial Actions (Interim Remedial Actions/ Final Remedial Actions (IRA/FRA))

Site ID	Site Name	Action	Remedy	FY
CC719Remed	Remediate 719	FRA	WASTE REMOVAL - DRUMS, TANKS, BULK CONTAINERS	2011

Duration of CR

Date of CR Inception: 199408

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC): 201410/201410

Date of CR completion including Long Term Management (LTM): 201409

CR Contamination Assessment

Contamination Assessment Overview

Environmental restoration activities include the IRP and MMRP. On Dec. 29, 2008, the Office of the Deputy Under Secretary of Defense for Installations and Environment, [ODUSD(I&E)], issued an interim policy for Defense Environmental Restoration Program (DERP) eligibility that rescinded the 1986 eligibility date for the IRP and the 2002 eligibility date for the MMRP. This made many sites previously addressed in the Army's CC program eligible for the DERP. Sites that are now eligible for the Munitions Response (MR) program have been migrated from Army Environmental Database-Compliance-related Cleanup (AEDB-CC) and given the naming convention of other MR sites. The newly eligible non-MR type sites are considered to be Installation Restoration (IR) sites; however, the newly eligible sites are being coded as Compliance Restoration (CR) in AEDB-R to distinguish them from the original IR sites and IR metrics.

Cleanup Exit Strategy

See individual site for the cleanup exit strategies.

CR Previous Studies

Title	Author	Date
There are no Previous Studies		

WEST POINT MIL RESERVATION

Compliance Restoration

Site Descriptions

Site ID: CCUST1230
Site Name: Golf Course UST

STATUS

Regulatory Driver: RCRA

Contaminants of Concern: Petroleum, Oil and Lubricants (POL), Volatiles (VOC)

Media of Concern: Soil

Phases	Start	End
ISC	200404	200405
INV	200603	200608
IMP(C)	201310	201409

RIP Date: N/A

RC Date: 201410

SITE DESCRIPTION

Confirmatory sampling (CS) following the removal of a 1,000-gallon No. 2 fuel oil tank at the Golf Course Clubhouse (Bldg. 1230) on April 18, 2004 indicates the presence of residual fuel oil contamination and for unknown reason possible gasoline contamination. The Golf Course Clubhouse (Bldg. 1230) is located just east of Route 9W near the Route 218/293 interchange. The removed UST exhibited holes and approximately 12 tons of contaminated soils were removed during the tank closure. The leaking tank was reported to the NYSDEC on April 8, 2004 who assigned it Spill No. 0400254. The UST was replaced with a fully compliant aboveground tank. A closure report was prepared and submitted to the NYSDEC on May 12, 2004. Sample analytical results exceed the NYSDEC guideline values and we anticipate a request for further action. A second phase of the investigation entailed performing geo-probe soil sampling around the former UST location in order to decipher the extent of petroleum contamination and hopefully the reason for volatile organics contamination.

A report documenting the findings has been provided by Fort Monmouth. Demolition of the Golf Course Clubhouse, planned for FY14, presents an opportunity for the removal of the remaining contamination. The soil excavation will be concurrent with the planned golf course project in FY14.

CLEANUP/EXIT STRATEGY

Soil excavation will be used to remove the remaining contamination.

Site Closeout (No Further Action) Summary

Site ID	Site Name	NFA Date	Documentation
CC719Remed	Remediate 719	201012	Closure report

CR Schedule

Date of CR Inception: 199408

Past Phase Completion Milestones

1994
ISC (CC719Remed - Remediate 719)
2004
ISC (CCUST1230 - Golf Course UST)
2006
INV (CCUST1230 - Golf Course UST)
2011
IMP(C) (CC719Remed - Remediate 719)

Projected Phase Completion Milestones

See attached schedule

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates

To Be Determined

Final RA(C) Completion Date: 201409

Schedule for Next Five-Year Review: N/A

Estimated Completion Date of CR at Installation (including LTM phase): 201409

WEST POINT MIL RESERVATION CR Schedule

= phase underway

SITE ID	SITE NAME	PHASE	FY14	FY15	FY16	FY17	FY18	FY19+
CCUST1230	Golf Course UST	IMP(C)						

Community Involvement

Technical Review Committee (TRC): None

Community Involvement Plan (Date Published): 201101

Restoration Advisory Board (RAB): No

Reason Not Established: The community has expressed no sufficient, sustained interest in a RAB.

Community Interest Solicited on: 201101

Efforts Taken to Determine Interest

The West Point IRP is in LTM and is no longer required to solicit interest in a RAB. The MMRP solicited interest in a RAB in 2011.

Results

No interest was expressed by the local community.

Follow-up Procedures

West Point in process of soliciting interest in 2013.

Additional Community Involvement Information

A Community Relations Plan was developed for the MMRP RI in January 2011. The USAG-WP community consists of approximately 10,000 military personnel and their family members, civilian personnel, and cadets. The town of Highlands, which adjoins USAG-WP to the south, has a population of 13,600.

During the investigation phase of an off-post landfill on the village of Highland Falls property, initial communication led to a project briefing to the school board concerning the impact on O'Neill High School. The presentation offered the reasons for performing the investigation, described the field techniques, and addressed the school board members' questions and concerns. The presentation was well received and established an excellent working relationship with the school board. Notification to the school board of subsequent remedial activities was provided through telephone calls, information papers and informal meetings.

In 2005 USAG-WP initiated a public affairs plan to release the results of the MMRP draft historical records review (HRR). During this effort the superintendent personally contacted local elected representatives regarding the report. The public affairs office (PAO) made announcements in local media outlets, contacted local environmental advocacy groups, and sent copies to regulatory agencies. The PAO also contacted each resident in areas affected across the river.

In 2006 USAG-WP conducted a technical project planning meeting with stakeholders to discuss the results of the SI. USAG-WP again initiated a public affairs plan to publicize the results of the MMRP SI. The PAO again made announcements through local media outlets, contacted local environmental advocacy groups, and sent copies to regulatory agencies. A public meeting was held but no members of the public attended.

A community relations council has been formalized where any future planned RAs can be presented. The Engineering/Public Works Subcommittee of the community relations council is chaired by the USAG-WP Director of Public Works and consists of local village and town officials, the town historian, and interested citizens. This committee provides the ideal forum for representing planned remedial activities which could affect the community.

On the post, USAG-WP has established residential mayors' meetings. Each residential area has an elected mayor who represents that community's interest and conveys its concerns to the local command. These community meetings also provide an excellent forum for presenting and discussing future remedial activities that may affect the local community.

The availability of these two operating public forums has limited the need to establish a RAB at USAG-WP.

Administrative Record is located at

Environmental Management Division of USAG-WP
USAG West Point
ATTN: IMNE-MIL-PWE-M
667A Ruger Road
West Point, New York 10996-1592

Community Involvement

(845) 938-5041

Information Repository is located at

West Point Community Library
622 Swift Road
West Point, New York 10996-1592
845-938-2974

Current Technical Assistance for Public Participation (TAPP): N/A

TAPP Title: N/A

Potential TAPP: N/A